WHAT IS CLAIMED IS:

1. A data structure for analyzing data in a computer-implemented data mining system, wherein the data structure is a data model that comprises a Gaussian Mixture Model that stores transactional data, and the data model is mapped to aggregate the transactional data for cluster analysis.

2. The data structure of claim 1, wherein the data model includes a basket table that contains summary information about the transactional data, an item table that contains information about individual items referenced in the transactional data, and a department table that contains aggregate information about the transactional data.

3. The data structure of claim 1, wherein the cluster analysis groups the transactional data into coherent groups according to perceived similarities in the transactional data.

4. The data structure of claim 1, wherein the data model is stored in a relational database managed by a relational database management system.

5. The data structure of claim 1, wherein the data model is accessed from a relational database managed by a relational database management system.

6. The data structure of claim 1, wherein the data model is mapped into a single flat table format to produce a correct level of aggregation for statistical analysis.

7. The data structure of claim 1, wherein the data model is mapped into a database view to produce a correct level of aggregation for statistical analysis.

8. The data structure of claim 1, wherein the data model is comprised of one row per transaction in the transactional data.

9. A method for analyzing data in a computer-implemented data mining system, comprising:

generating a data structure in the computer-implemented data mining system, wherein the data structure is a data model that comprises a Gaussian Mixture Model that stores transactional data; and

mapping the data model to aggregate the transactional data for cluster analysis.

10. The method of claim 9, wherein the data model includes a basket table that contains summary information about the transactional data, an item table that contains information about individual items referenced in the transactional data, and a department table that contains aggregate information about the transactional data.

11. The method of claim 9, wherein the cluster analysis groups the transactional data into coherent groups according to perceived similarities in the transactional data.

12. The method of claim 9, wherein the data model is stored in a relational database managed by a relational database management system.

13. The method of claim 9, wherein the data model is accessed from a relational database managed by a relational database management system.

14. The method of claim 9, wherein the mapping step comprises mapping the data model into a single flat table format to produce a correct level of aggregation for statistical analysis.

15. The method of claim 9, wherein the mapping step comprises mapping the data model into a database view to produce a correct level of aggregation for statistical analysis.

16. The method of claim 9, wherein the data model is comprised of one row per transaction in the transactional data.

17. An apparatus for analyzing data in a computer-implemented data mining system, comprising:

means for generating a data structure in the computer-implemented data mining system, wherein the data structure is a data model that comprises a Gaussian Mixture Model that stores transactional data; and

means for mapping the data model to aggregate the transactional data for cluster analysis.

18. The apparatus of claim 17, wherein the data model includes a basket table that contains summary information about the transactional data, an item table that contains information about individual items referenced in the transactional data, and a department table that contains aggregate information about the transactional data.

19. The apparatus of claim 17, wherein the cluster analysis groups the transactional data into coherent groups according to perceived similarities in the transactional data.

20. The apparatus of claim 17, wherein the data model is stored in a relational database managed by a relational database management system.

21. The apparatus of claim 17, wherein the data model is accessed from a relational database managed by a relational database management system.

22. The apparatus of claim 17, wherein the means for mapping comprises means for mapping the data model into a single flat table format to produce a correct level of aggregation for statistical analysis.

23. The apparatus of claim 17, wherein the means for mapping comprises means for mapping the data model into a database view to produce a correct level of aggregation for statistical analysis.

24. The apparatus of claim 17, wherein the data model is comprised of one row per transaction in the transactional data.